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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,037	07/19/2001	Dennis L. Mathies	INTL-0569-US (P11414)	8472

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TROP PRUNER & HU, PC
8554 KATY FREEWAY
SUITE 100
HOUSTON, TX 77024

EXAMINER

AMINI, JAVID A

ART UNIT PAPER NUMBER

2672

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/909,037

Applicant(s)

MATTHIES, DENNIS L.

Examiner

Javid A. Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-12 and 26-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/27/2005 has been entered.

Claim Rejections - 35 USC § 112

Claims 1-7, 9-12 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The subject matter of "integrally formed" that Applicant amended the independent claim 1 on 9/27/2005 is not described in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-12, 26-32 rejected under 35 U.S.C. 103(a) as being unpatentable over Greene et al. hereinafter, Greene, and Moore and further in view of Seraphim et al. hereinafter Seraphim.

1. Claim 1.

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The size and the weight of a tile are the most important parameters of being portable, since Applicant does not specify at least size and weight of a tile. Greene in fig. 5 illustrates a first structural plate as labeled 28, the claim invention claims that "A large area display comprising: a first structural plate". Greene in fig. 1 illustrates a display 20 of that is constructed of a plurality of individual LCD tiles connectable, having inputs Q and P that are fed to each LCD tile. All connectable tiles are installed to the plate 28, Greene at col. 5, lines 52-54 discloses that the tiles have been manufactured and assembled such that the pixel pitch across all seams is the same as that on the tiles, see following claim invention: "a first and second tile connectable to said plate, said tiles including image generating pixels". Seraphim in fig. 1 clearly illustrates a plate that a tile attached to it. Greene silences about the following portion of the claim invention, "wherein one of said tiles includes integrally formed alignment tabs and the other said tiles includes integrally formed alignment grooves having a shape complementary to said first shape to align the first tile relative to the second tile with said tabs engaged in said grooves." Seraphim does not explicitly specify a groove and tab as Applicant illustrates in fig. 5a of the specification. Knowing that Seraphim in fig. 3 illustrates a tab 23. However, Moore in fig. 14 illustrates similar tabs and grooves that Applicant discloses in fig. 5a in the specification. Moore illustrates an interlocking structure built into the top fiber. Moore in figs. 12-13 illustrates aligning the tab engaged in the groove. The motivation for a person skill in the art to incorporate the teaching of Moore's structural that shown in fig. 14 and teaching of the Seraphim in fig. 13 fastening the tiles to the back plate into back of the Greene's LCD in fig. 1. The result would be similar to the claim invention in the present application.

2. Claim 2.

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“The display of claim 1 including a set of fasteners on said first and second tiles, said fasteners fastening said first and second tiles to said first structural plate”, the step is obvious because in order the plate hold the tiles, one must fasten the tile to the plate (e.g. screws, etc.).

3. Claim 3.

“The display of claim 2 wherein said fasteners include threaded pins, said plate including holes to receive said pins, said fasteners adjustably position said tiles relative to said plate”, Seraphim in fig. 13 illustrates fastening the tiles to the back plate (155).

4. Claim 4.

“The display of claim 3 wherein the hole in said plate is of substantially greater diameter than the diameter of one of said pins”, the step is obvious because in order to fit the pins or screws in the holes, they must have greater diameter.

5. Claim 5.

“The display of claim 4 including a pair of locking nuts, one on each side of said plate”, the step is obvious because in order the plate hold the tiles, one obvious method is of locking nuts.

6. Claim 6.

“The display of claim 5 including at least two pins on each tile”, see rejection of claim 5.

Applicant should be specifying the significant of “two pins” on each tile, e.g. an appropriate pin can also held the tile to the plate.

7. Claim 7.

“The display of claim 1 wherein each tile may be adjusted in a plane parallel to the plane of said plate and inwardly and outwardly with respect to said plane”. The specification does not support how much each tile may be adjusted inwardly and outwardly. Applicant on page 6 line 21 in the

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specification discloses, "this adjusts the amount of extension of the pin outwardly from the structural plate", but Applicant silences about how much of extension of the pin consider in the invention? Examiner's uncertainty: If one tile adjusted inwardly and the next tile adjusted outwardly e.g. 5 inches, what happens to the alignment tabs and grooves or the gaps between the tiles. Also the reference Greene at col. 3, lines 4-16 discloses that a set-up and adjustment capability to the display. Brightness, contrast, threshold, tint, white point and reference levels are examples. Some of these adjustments can be set by both the viewer and the display manufacturer; others are deliberately made inaccessible to the viewer. To the display manufacturer, these adjustments allow reasonable manufacturing tolerances for the components of the display. They also allow for variations across the viewing area of the display unit that occur, at least in part, due to an inherent non-uniformity of manufacturing processes. As the result these adjustments present a more acceptable picture quality to the viewer.

8. Claims 9 and 10.

"The display of claim 1 including mullions to fit over the gaps between said first and second tiles", Moore in figs. 13 and 14 shows the advantage of combining the interlocking mechanism 50 with the black matrix pattern 52 (i.e. considered as mullion). Note that the fibers can be separated a distance equal to the interlocking tab 50a before the viewer can see between the fibers.

9. Claim 11.

"The display of claim 1 including a second structural plate and a plurality of tiles connected to a first and second structural plates, said first and second structural plates being adjustably

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securable to a third structural plate”, Seraphim in figs. 12a, 12b and 12c illustrates the claim invention.

10. Claim 12.

“The display of claim 11 including a plurality of tiles connected to first and second structural plates and a plurality of first and second structural plates coupled to a third structural plate to form a large area display”, Seraphim in figs. 12a, 12b and 12c illustrates the claim

11. Claim 26.

See rejection of claim 1.

12. Claims 27-28

Applicant claims the surface profile features and the region above the gaps are v-shaped. Moore in fig. 14 illustrates that.

13. Claim 29.

Seraphim in fig. 2 illustrates the claim invention.

14. Claim 30.

Moore in fig. 14 illustrates that.

15. Claim 31-32.

See rejection of claims 1, 7 and 9.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JEFFERY BRIEN
PRIMARY EXAMINER

Javid A Amini
Examiner
Art Unit 2672

Javid Amini